

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A solid-state imaging element, comprising:

unit pixels, arranged in a matrix, each of which has a photoelectric conversion element, a transfer switch for transferring charge stored in said photoelectric conversion element, a charge store part for storing charge transferred by said transfer switch, a reset switch for resetting said charge store part, and an amplifying element for outputting a signal in accordance with a potential of said charge in said charge store part;

a vertical scanning circuit for selecting pixels in units of rows by controlling a reset potential applied to selected ones of said reset switches;

wherein each of said reset switches is a ~~depression~~ depletion type transistor;

a horizontal scanning circuit for sequentially selecting signals output to said vertical signal lines; and

an output circuit for outputting signals selected by said horizontal scanning circuit.

2. (Currently Amended) A solid-state imaging element as claimed in claim 1, wherein said vertical scanning circuit applies vertical selection pulses sequentially output during vertical scanning to ~~said~~ selected ones of said reset switches ~~as a~~ at said reset potential thereof.

3. (Original) A solid-state imaging element as claimed in claim 1, wherein said charge store part is floating diffusion.

4. (Canceled).

5. (Original) A solid-state imaging element as claimed in claim 1, wherein said output circuit outputs signals read into said vertical signal lines in voltage mode.

6. (Original) A solid-state imaging element as claimed in claim 1, wherein said output circuit outputs signals read into said vertical signal lines in current mode.

7. (Previously Presented) A solid-state imaging element as claimed in claim 1, wherein said unit pixels include an overflow path between said photoelectric conversion element and an area to which a pixel source voltage is applied, said overflow path being used to discharge excess charges of said photoelectric conversion element.

8. (Previously Presented) A solid-state imaging element as claimed in claim 1, wherein a negative potential is applied to the control electrode of each of said transfer switches.

Claims 9-11 (Canceled).

12. (Previously Presented) A method for driving a solid-state imaging element which includes unit pixels, arranged in a matrix, each of which has a photoelectric conversion element, a transfer switch for transferring charge stored in said photoelectric conversion element, a charge store part for storing charge transferred by said transfer switch, a reset switch for resetting said charge store part, and an amplifying element for outputting a signal in accordance with a potential of said charge store part, said method comprising the step of:

selecting pixels in units of rows by controlling a reset potential applied to selected ones of said reset switches, wherein a negative voltage is applied to a gate of said reset switch.

13. (Original) A method for driving a solid-state imaging element as claimed in claim 12, further comprising the step of:

outputting signals read into said vertical signal lines in voltage mode.

14. (Original) A method for driving a solid-state imaging element as claimed in claim 12, further comprising the step of:

outputting signals read into said vertical signal lines in current mode.

15. (Previously Presented) A camera system using a solid-state imaging element as an imaging device, said solid-state imaging element, comprising:

unit pixels arranged in a matrix, each of which ~~[[have]]~~ has a photoelectric conversion element, a transfer switch for transferring charge stored in said photoelectric conversion element, a charge store part for storing charge transferred by said transfer switch, a reset

switch for resetting said charge store part, and an amplifying element for outputting a signal in accordance with a potential of said charge store part;

a vertical scanning circuit for selecting pixels in units of rows by controlling a reset potential applied to selected reset switches;

wherein each of said reset switches is a ~~depression~~ depletion type transistor;

a horizontal scanning circuit for sequentially selecting signals output to said vertical signal lines in units of columns; and

an output circuit for outputting signals selected by said horizontal scanning circuit.

16. (Previously Presented) The solid-state imaging element of claim 1, wherein a falling edge of the reset pulse triggers reading of a reference level.

17. (Previously Presented) The solid-state imaging element of claim 1, wherein a changing state of the reset pulse and a selection pulse initiates a pixel reading operation.

18. (Previously Presented) The method of driving a solid-state imaging element of claim 12, further comprising triggering reading of a reference level with a falling edge of the reset pulse.

19. (Previously Presented) The method of driving a solid-state imaging element of claim 12, wherein a changing state of the reset pulse and a selection pulse initiates a pixel reading operation.

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20. (Previously Presented) The camera system of claim 15, wherein a falling edge of the reset pulse triggers reading of a reference level.

21. (Previously Presented) The camera system of claim 15, wherein a changing state of the reset pulse and a selection pulse initiates a pixel reading operation.